

Reply to Office Action of June 16, 2004

REMARKS

Claims 1-16 are pending in the present application. Claims 1 and 11 are independent claims.

The Specification and Abstract have been revised slightly merely to correct informalities and to improve form according to U.S. practice. These modifications do not add new matter to the disclosure.

Claim Objection

Claim 15 has been objected to for lacking an antecedent basis. To correct this informality, claims 11 and 15 have been amended. Accordingly, the objection to claim 15 must be withdrawn.

35 U.S.C. § 103 Rejection

Claims 1-4 and 6-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Takahashi et al. (U.S. Patent No. 5,966,473) and Syeda-Mahmood et al. (U.S. Patent No. 6,621,941). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Takahashi et al. is directed to detecting a drawn box around a given point in a bit map, and various methods for such detection are known in the art. However, this is not the crux of the claimed invention in connection with the present application. The problem

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that the present application solves, relates to digitally archiving scanned documents. To be able to retrieve documents from the archive, the scanned documents have to be identifiable after storage and heretofore some kind of indexing is necessary. Various solutions for this problem are known in the art, such as automatically generating a filename, requesting the user to input a filename each time, or requesting the user to enter meta data of the file to be archived each time. Also known in the art are solutions, where information from the scanned image is extracted and is used for indexing purposes. However, all the solutions of this category, so far known in the prior art, require that specific position information of data to be extracted from the image has to be made known to the system in advance, and do not address a case where no predefined information about the documents to be archived is available.

It is for this problem that the presently embodied invention offers a solution as follows: an image is scanned such that the scanned image is displayed on the operator panel of the machine; the user is requested to point to an arbitrary position P in a box on the image wherein information relevant for indexing the document is available; then the characters in that box are recognized by the OCR, and stored for indexing, as set forth in independent claims 1 and 11. In this way, every document can be indexed in an easy way,

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without the necessity of prior knowledge of the document in the system, be it as a template or otherwise.

This problem and this solution provided by the present invention are not addressed in the applied references. For instance, Takahashi et al. is concerned with a predefined form in such a way that subsequently, when filled-in forms are scanned, data can be extracted from the form and stored in the predefined fields. Syeda-Mahmood et al. makes use of a plurality of model images stored in memory.

In clear contrast, Applicants' invention provides a flexible solution, because an operator is now relieved of the burden of either typing in some name or meta data of the document, or making up in advance templates for all kinds of documents he expects to archive, while at the same time a variety of different documents can be accommodated by the system. Applicants' invention offers an elegant solution, because it offers maximum flexibility to the user: it is suited for a variety of documents, without the cumbersome task to define in advance all document types to be expected, or without entering character data if a document is not predefined. One will understand that the inventive method is suited for archiving engineering drawings, since a table like structure is readily available.

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Accordingly, even if the references are combinable, the combination of references would still fail to teach or suggest the combination of features as recited in independent claims 1 and 11. Therefore, independent claims 1 and 11 and their dependent claims (due to their dependency) are patentable over the applied references, and the rejection must be withdrawn.

Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Takahashi et al. and Syeda-Mahmood et al., and further in view of Saitoh (U.S. Patent No. 5,220,621). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

As discussed hereinabove, the combination of Takahashi et al. and Syeda-Mahmood et al. fails to teach or suggest the features recited in independent claim 1 from which claim 5 depends. Further, Saitoh does not overcome these deficiencies since Saitoh is merely relied on for teaching the use of a Hough transformation algorithm. Therefore, the combination of references as applied by the Examiner does not teach or render obvious the invention as recited in independent claim 1 and its dependent claim 5 (due to its dependency). Accordingly, the rejection is improper and must be withdrawn.

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Conclusion

In view of the above amendments and remarks, issuance of a Notice of Allowance is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong (Reg. No. 40,953) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

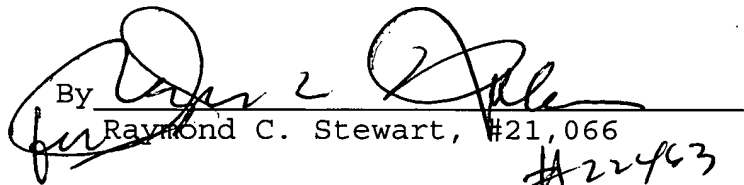
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee of \$110.00 is attached hereto.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment(s): Abstract